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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,666	09/09/2003	Francis Campana	MP0297	1999

26703 7590 04/06/2009

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ART UNIT	PAPER NUMBER
2416	

MAIL DATE	DELIVERY MODE
04/06/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/658,666	CAMPANA ET AL.	
	Examiner	Art Unit	
	JASON LEVELLE	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-66* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-66* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1, 4, 8-10, 17, 18, 22, 23, 26, 30-32, 39, 40, 44, 45, 48, 52-54, 61, 62, and 66** are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent Pub. 2001/0044914 A1 to *Nakano et al*.

As to **claim 1**, *Nakano* discloses a resynchronization device for an Ethernet network device including a transmitter and a receiver (Fig. 3, local device transmission and reception and ¶0002 & ¶0003 for high-speed bidirectional data transfer on a data bus such as Ethernet), comprising:

a detector that detects faulty code groups received by the receiver (Fig. 8, S907, a code is received);

a counter that counts said faulty code groups that are detected during a predetermined period (Fig. 8, S916 , invalid_count is incremented); and

a resynchronization trigger that asserts a resynchronization signal if said counter exceeds a predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

As to **claim 4**, *Nakano* discloses a resynchronization device wherein said faulty code groups include idle code groups that match idle code groups generated by the transmitter of the local network device (Fig. 8, S913 and ¶0083.)

As to **claim 8**, *Nakano* discloses a resynchronization device wherein said resynchronization trigger counts a number of times that said resynchronization signal is asserted without bringing down a link (Fig. 8, S917 when invalid_count has a value of 1, 2, or 3 and returns to S915 without synchronization.)

As to **claim 9**, *Nakano* discloses a resynchronization device wherein said resynchronization trigger does not assert said resynchronization signal when said resynchronization signal count reaches a predetermined number (Fig. 8, S917 when invalid_count has a value of 1, 2, or 3 and returns to S915 without synchronization.)

As to **claim 10**, *Nakano* discloses a resynchronization device further comprising a timer that times said predetermined period (¶0079, timer is restarted), wherein at least one of said timer and said count of said matching idle code groups is reset when non-matching idle code groups are received (Fig. 8, when a local idle code is detected at S913 and Idle_Flag=1 the system will return to S901-S907 which includes a timer reset and count reset.)

As to **claim 17**, *Nakano* discloses a descrambler resynchronization device for an Ethernet network device including a transmitter and a receiver (Fig. 3, local device transmission and reception and ¶0002 & ¶0003 for high-speed bidirectional data transfer on a data bus such as Ethernet), comprising:

a descrambler detector that detects idle code groups (Fig. 8, S907, a code is received) that match idle code groups generated by the transmitter of the device (Fig. 8, S913 and ¶0083);

a counter that counts said matching idle code groups that are detected by said descrambler detector during a predetermined period (Fig. 8, S915, Idle_Flag is incremented form 0 to 1); and

a resynchronization trigger that asserts a resynchronization signal if said counter exceeds a predetermined threshold during said predetermined period (Fig. 8, S914, Idle_Flag=1.)

As to **claim 18**, *Nakano* discloses a descrambler resynchronization device further comprising a timer that times said predetermined period (¶0079, timer is restarted), wherein at least one of said timer and said count of said matching idle code groups is reset when non- matching idle code groups are received (Fig. 8, when a local idle code is detected at S913 and Idle_Flag=1 the system will return to S901-S907 which includes a timer reset and count reset.)

As to **claim 22**, *Nakano* discloses a descrambler resynchronization device wherein said resynchronization trigger asserts said resynchronization signal a predetermined number of times (Fig. 8, S917, a resynchronization signal is asserted for each Idle_Flag value, yes for 1 and no for 0.)

As to **claim 23**, *Nakano* discloses a resynchronization device for an Ethernet network device including a transmitter and a receiver (Fig. 3, local device transmission and reception and ¶0002 & ¶0003 for high-speed bidirectional data transfer on a data bus such as Ethernet), comprising:

detecting means for detecting faulty code groups received by the receiver (Fig. 8, S907, a code is received);

counting mean for counting said faulty code groups that are detected during a predetermined period (Fig. 8, S916 , invalid_count is incremented); and

trigger means for asserting a resynchronization signal if said counter exceeds a predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

As to **claim 26**, *Nakano* discloses a resynchronization device wherein said faulty code groups include idle code groups that match idle code groups generated by the transmitter of the local network device (Fig. 8, S913 and ¶0083.)

As to **claim 30**, *Nakano* discloses a resynchronization device wherein said resynchronization trigger counts a number of times that said resynchronization signal is asserted without bringing down a link (Fig. 8, S917 when invalid_count has a value of 1, 2, or 3 and returns to S915 without synchronization.)

As to **claim 31**, *Nakano* discloses a resynchronization device wherein said resynchronization trigger does not assert said resynchronization signal when said resynchronization signal count reaches a predetermined number (Fig. 8, S917 when invalid_count has a value of 1, 2, or 3 and returns to S915 without synchronization.)

As to **claim 32**, *Nakano* discloses a resynchronization device further comprising a timer that times said predetermined period (¶0079, timer is restarted), wherein at least one of said timer and said count of said matching idle code groups is reset when non-matching idle code groups are received (Fig. 8, when a local idle code is detected at S913 and Idle_Flag=1 the system will return to S901-S907 which includes a timer reset and count reset.)

As to **claim 39**, *Nakano* discloses a descrambler resynchronization device for an Ethernet network device including a transmitter and a receiver (Fig. 3, local device transmission and reception and ¶0002 & ¶0003 for high-speed bidirectional data transfer on a data bus such as Ethernet), comprising:

descrambler detector means for detecting idle code groups (Fig. 8, S907, a code is received) that match idle code groups generated by the transmitter of the device (Fig. 8, S913 and ¶0083);

counting means for counting said matching idle code groups that are detected by said descrambler detecting mean during a predetermined period (Fig. 8, S915, Idle_Flag is incremented form 0 to 1); and

a resynchronization trigger that asserts a resynchronization signal if said counter exceeds a predetermined threshold during said predetermined period (Fig. 8, S914, Idle_Flag=1.)

As to **claim 40**, *Nakano* discloses a descrambler resynchronization device further comprising a timer that times said predetermined period (¶0079, timer is restarted), wherein at least one of said timer and said count of said matching idle code groups is reset when non- matching idle code groups are received (Fig. 8, when a local idle code is detected at S913 and Idle_Flag=1 the system will return to S901-S907 which includes a timer reset and count reset.)

As to **claim 44**, *Nakano* discloses a descrambler resynchronization device wherein said resynchronization trigger asserts said resynchronization signal a predetermined number of times (Fig. 8, S917, a resynchronization signal is asserted for each Idle_Flag value, yes for 1 and no for 0.)

As to **claim 45**, *Nakano* discloses a method for an Ethernet network device including a transmitter and a receiver (Fig. 3, local device transmission and reception and ¶0002 & ¶0003 for high-speed bidirectional data transfer on a data bus such as Ethernet), comprising:

detecting faulty code groups received by the receiver (Fig. 8, S907, a code is received);

counting said faulty code groups that are detected during a predetermined period (Fig. 8, S916 , invalid_count is incremented); and

asserting a resynchronization signal if said counter exceeds a predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

As to **claim 48**, *Nakano* discloses a resynchronization method wherein said faulty code groups include idle code groups that match idle code groups generated by the transmitter of the local network device (Fig. 8, S913 and ¶0083.)

As to **claim 52**, *Nakano* discloses a resynchronization method wherein a resynchronization trigger counts a number of times that said resynchronization signal is asserted without bringing down a link (Fig. 8, S917 when invalid_count has a value of 1, 2, or 3 and returns to S915 without synchronization.)

As to **claim 53**, *Nakano* discloses a resynchronization method wherein a resynchronization trigger does not assert said resynchronization signal when said resynchronization signal count reaches a predetermined number (Fig. 8, S917 when invalid_count has a value of 1, 2, or 3 and returns to S915 without synchronization.)

As to **claim 54**, *Nakano* discloses a resynchronization method further comprising a timer that times said predetermined period (¶0079, timer is restarted), wherein at least one of said timer and said count of said matching idle code groups is reset when non-matching idle code groups are received (Fig. 8, when a local idle code is detected at S913 and Idle_Flag=1 the system will return to S901-S907 which includes a timer reset and count reset.)

As to **claim 61**, *Nakano* discloses a method providing descrambler resynchronization in an Ethernet network device including a transmitter and a receiver (Fig. 3, local device transmission and reception and ¶0002 & ¶0003 for high-speed bidirectional data transfer on a data bus such as Ethernet), comprising:

detecting idle code groups (Fig. 8, S907, a code is received) that match idle code groups generated by the transmitter of the device (Fig. 8, S913 and ¶0083);

counting said matching idle code groups that are detected by said descrambler detector during a predetermined period (Fig. 8, S915, Idle_Flag is incremented form 0 to 1); and

asserting a resynchronization signal if said counter exceeds a predetermined threshold during said predetermined period (Fig. 8, S914, Idle_Flag=1.)

As to **claim 62**, *Nakano* discloses a descrambler resynchronization method further comprising a timer that times said predetermined period (¶0079, timer is restarted), wherein at least one of said timer and said count of said matching idle code groups is reset when non- matching idle code groups are received (Fig. 8, when a local idle code is detected at S913 and Idle_Flag=1 the system will return to S901-S907 which includes a timer reset and count reset.)

As to **claim 66**, *Nakano* discloses a descrambler resynchronization method wherein a resynchronization trigger asserts said resynchronization signal a predetermined number of times (Fig. 8, S917, a resynchronization signal is asserted for each Idle_Flag value, yes for 1 and no for 0.)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 2, 3, 11, 12, 16, 24, 25, 33, 34, 38, 46, 47, 55, 56, and 60** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Pub. 2001/0044914 A1 to *Nakano et al.*, and further in view of US Patent No. 6,538,994 B1 to *Horspool et al.*

As to **claim 2**, *Nakano* discloses a resynchronization device that detects faulty code groups received by a receiver.

Nakano does not disclose faulty code groups as false carriers.

Horspool discloses a resynchronization device wherein said faulty code groups include false carriers (Fig 5. and column 3, lines 55-56, a false carrier is detected from a corrupted idle symbol.)

Nakano and Horspool are analogous art because they both teach on the detection of idle codes over a communication link. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use faulty code groups as false carriers. The suggestion/motivation would have been to select the highest rate for transmission between two stations (*Horspool,* column 1, lines 38-41.)

As to **claim 3**, *Nakano* discloses a resynchronization device that detects faulty idle code groups received by a receiver.

Nakano does not disclose faulty code groups as false carriers.

Horspool discloses a resynchronization device wherein said false carriers include non-idle code groups other than frame delimiters (Fig 5. and column 3, lines 55-56, a false carrier is detected from a corrupted idle symbol.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use faulty code groups as false carriers. The suggestion/motivation would have been to select the highest rate for transmission between two stations (*Horspool*, column 1, lines 38-41.)

As to **claim 11**, *Nakano* discloses a false carrier resynchronization device for an Ethernet network device including a transmitter and a receiver (Fig. 3, local device transmission and reception and ¶0002 & ¶0003 for high-speed bidirectional data transfer on a data bus such as Ethernet), comprising:

a detector that detects faulty code received by the receiver (Fig. 8, S907, a code is received);

a counter that counts said faulty codes that are detected during a predetermined period (Fig. 8, S916 , invalid_count is incremented); and

a resynchronization trigger that asserts a resynchronization signal if said counter exceeds a predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

Nakano does not disclose a false carrier detector that detects false carriers received by the receiver.

Horspool discloses a resynchronization device wherein a false carrier detector (Fig. 2, port 2a) detects faulty code groups which are false carriers (Fig 5. and column 3, lines 55-56, a false carrier is detected from a corrupted idle symbol.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a false carrier detector that detects false carriers received by the receiver. The suggestion/motivation would have been to select the highest rate for transmission between two stations (*Horspool,* column 1, lines 38-41.)

As to **claim 12**, *Nakano* discloses a false carrier resynchronization device that detects faulty code groups received by a receiver.

Nakano does not disclose faulty code groups as false carriers.

Horspool discloses a resynchronization device wherein said faulty code groups include false carriers (Fig 5. and column 3, lines 55-56, a false carrier is detected from a corrupted idle symbol.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use faulty code groups as false carriers. The suggestion/motivation would have been to select the highest rate for transmission between two stations (*Horspool,* column 1, lines 38-41.)

As to **claim 16**, *Nakano* discloses a false carrier resynchronization device wherein said resynchronization trigger asserts said resynchronization signal a predetermined number of times (Fig. 8, S917, a resynchronization signal is asserted for each invalid_count value 1, 2, 3, and 4.)

As to **claim 24**, *Nakano* discloses a resynchronization device that detects faulty code groups received by a receiver.

Nakano does not disclose faulty code groups as false carriers.

Horspool discloses a resynchronization device wherein said faulty code groups include false carriers (Fig 5. and column 3, lines 55-56, a false carrier is detected from a corrupted idle symbol.)

Nakano and Horspool are analogous art because they both teach on the detection of idle codes over a communication link. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use faulty code groups as false carriers. The suggestion/motivation would have been to select the highest rate for transmission between two stations (*Horspool,* column 1, lines 38-41.)

As to **claim 25**, *Nakano* discloses a resynchronization device that detects faulty idle code groups received by a receiver.

Nakano does not disclose faulty code groups as false carriers.

Horspool discloses a resynchronization device wherein said false carriers include non-idle code groups other than frame delimiters (Fig 5. and column 3, lines 55-56, a false carrier is detected from a corrupted idle symbol.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use faulty code groups as false carriers. The suggestion/motivation would have been to select the highest rate for transmission between two stations (*Horspool*, column 1, lines 38-41.)

As to **claim 33**, *Nakano* discloses a false carrier resynchronization device for an Ethernet network device including a transmitter and a receiver (Fig. 3, local device transmission and reception and ¶0002 & ¶0003 for high-speed bidirectional data transfer on a data bus such as Ethernet), comprising:

detecting means for detecting faulty code received by the receiver (Fig. 8, S907, a code is received);

counting means for counting said faulty codes that are detected during a predetermined period (Fig. 8, S916 , invalid_count is incremented); and

trigger means for asserting a resynchronization signal if said counter exceeds a predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

Nakano does not disclose false carrier detecting means that detects false carriers received by the receiver.

Horspool discloses a resynchronization device wherein a false carrier detecting means (Fig. 2, port 2a) detects faulty code groups which are false carriers (Fig 5. and column 3, lines 55-56, a false carrier is detected from a corrupted idle symbol.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a false carrier detecting means that detects false carriers received by the receiver. The suggestion/motivation would have been to select the highest rate for transmission between two stations (*Horspool,* column 1, lines 38-41.)

As to **claim 34**, *Nakano* discloses a false carrier resynchronization device that detects faulty code groups received by a receiver.

Nakano does not disclose faulty code groups as false carriers.

Horspool discloses a resynchronization device wherein said faulty code groups include false carriers (Fig 5. and column 3, lines 55-56, a false carrier is detected from a corrupted idle symbol.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use faulty code groups as false carriers. The suggestion/motivation would have been to select the highest rate for transmission between two stations (*Horspool,* column 1, lines 38-41.)

As to **claim 38**, *Nakano* discloses a false carrier resynchronization device wherein said resynchronization trigger asserts said resynchronization signal a predetermined number of times (Fig. 8, S917, a resynchronization signal is asserted for each invalid_count value 1, 2, 3, and 4.)

As to **claim 46**, *Nakano* discloses a resynchronization method that detects faulty code groups received by a receiver.

Nakano does not disclose faulty code groups as false carriers.

Horspool discloses a resynchronization device wherein said faulty code groups include false carriers (Fig 5. and column 3, lines 55-56, a false carrier is detected from a corrupted idle symbol.)

Nakano and Horspool are analogous art because they both teach on the detection of idle codes over a communication link. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use faulty code groups as false carriers. The suggestion/motivation would have been to select the highest rate for transmission between two stations (*Horspool,* column 1, lines 38-41.)

As to **claim 47**, *Nakano* discloses a resynchronization method that detects faulty idle code groups received by a receiver.

Nakano does not disclose faulty code groups as false carriers.

Horspool discloses a resynchronization device wherein said false carriers include non-idle code groups other than frame delimiters (Fig 5. and column 3, lines 55-56, a false carrier is detected from a corrupted idle symbol.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use faulty code groups as false carriers. The suggestion/motivation would have been to select the highest rate for transmission between two stations (*Horspool*, column 1, lines 38-41.)

As to **claim 55**, *Nakano* discloses a method for providing false carrier resynchronization in an Ethernet network device including a transmitter and a receiver (Fig. 3, local device transmission and reception and ¶0002 & ¶0003 for high-speed bidirectional data transfer on a data bus such as Ethernet), comprising:

detecting faulty code received by the receiver (Fig. 8, S907, a code is received);

counting said faulty codes that are detected during a predetermined period (Fig. 8, S916 , invalid_count is incremented); and

asserting a resynchronization signal if said counter exceeds a predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

Nakano does not disclose a method detecting false carriers received by the receiver.

Horspool discloses a method wherein a false carrier detector (Fig. 2, port 2a) detects faulty code groups which are false carriers (Fig 5. and column 3, lines 55-56, a false carrier is detected from a corrupted idle symbol.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a false carrier detector that detects false carriers received by the receiver. The suggestion/motivation would have been to select the highest rate for transmission between two stations (*Horspool,* column 1, lines 38-41.)

As to **claim 56**, *Nakano* discloses a false carrier resynchronization method that detects faulty code groups received by a receiver.

Nakano does not disclose faulty code groups as false carriers.

Horspool discloses a resynchronization device wherein said faulty code groups include false carriers (Fig 5. and column 3, lines 55-56, a false carrier is detected from a corrupted idle symbol.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use faulty code groups as false carriers. The

suggestion/motivation would have been to select the highest rate for transmission between two stations (*Horspool,* column 1, lines 38-41.)

As to **claim 60**, *Nakano* discloses a false carrier resynchronization method wherein a resynchronization trigger asserts said resynchronization signal a predetermined number of times (Fig. 8, S917, a resynchronization signal is asserted for each invalid_count value 1, 2, 3, and 4.)

5. **Claims 5-7, 19-21, 27-29, 41-43, 49-51, and 63-65** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Pub. 2001/0044914 A1 to *Nakano et al.*, and further in view of IEEE Std 802.3ab-1999.

As to **claim 5**, *Nakano* discloses a resynchronization device comprising a resynchronization signal.

Nakano does not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

Nakano and IEEE Std 802.3ab-1999 are analogous art because they both teach on the detection of idle codes over a communication link. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 6**, *Nakano* discloses a resynchronization device wherein a resynchronization signal is forced to a first state when said counter exceeds said predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

Nakano does not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 7**, *Nakano* does not disclose a network device compliant with IEEE section 802.3ab

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein the network device is compliant with IEEE section 802.3ab (pg. 18, Fig. 40-3.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to comply with IEEE section 802.3ab. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 19**, *Nakano* discloses a descrambler resynchronization device comprising a resynchronization signal.

Nakano does not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a descrambler resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

Nakano and IEEE Std 802.3ab-1999 are analogous art because they both teach on the detection of idle codes over a communication link. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 20**, *Nakano* discloses a descrambler resynchronization device wherein a resynchronization signal is forced to a first state when said counter

exceeds said predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

Nakano does not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a descrambler resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 21**, *Nakano* does not disclose a descrambler network device compliant with IEEE section 802.3ab

The IEEE Std 802.3ab-1999 discloses a descrambler resynchronization device wherein the network device is compliant with IEEE section 802.3ab (pg. 18, Fig. 40-3.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to comply with IEEE section 802.3ab. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 27**, *Nakano* discloses a resynchronization device comprising a resynchronization signal.

Nakano does not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

Nakano and IEEE Std 802.3ab-1999 are analogous art because they both teach on the detection of idle codes over a communication link. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 28**, *Nakano* discloses a resynchronization device wherein a resynchronization signal is forced to a first state when said counter exceeds said predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

Nakano does not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 29**, *Nakano* does not disclose a network device compliant with IEEE section 802.3ab

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein the network device is compliant with IEEE section 802.3ab (pg. 18, Fig. 40-3.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to comply with IEEE section 802.3ab. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 41**, *Nakano* discloses a descrambler resynchronization device comprising a resynchronization signal.

Nakano does not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a descrambler resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

Nakano and IEEE Std 802.3ab-1999 are analogous art because they both teach on the detection of idle codes over a communication link. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 42**, *Nakano* discloses a descrambler resynchronization device wherein a resynchronization signal is forced to a first state when said counter exceeds said predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

Nakano does not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a descrambler resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 43**, *Nakano* does not disclose a descrambler network device compliant with IEEE section 802.3ab

The IEEE Std 802.3ab-1999 discloses a descrambler resynchronization device wherein the network device is compliant with IEEE section 802.3ab (pg. 18, Fig. 40-3.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to comply with IEEE section 802.3ab. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 49**, *Nakano* discloses a resynchronization method comprising a resynchronization signal.

Nakano does not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a resynchronization method wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

Nakano and IEEE Std 802.3ab-1999 are analogous art because they both teach on the detection of idle codes over a communication link. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 50**, *Nakano* discloses a resynchronization method wherein a resynchronization signal is forced to a first state when said counter exceeds said predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

Nakano does not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 51**, *Nakano* does not disclose a method compliant with IEEE section 802.3ab

The IEEE Std 802.3ab-1999 discloses a resynchronization method wherein the network device is compliant with IEEE section 802.3ab (pg. 18, Fig. 40-3.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to comply with IEEE section 802.3ab. The

suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 63**, *Nakano* discloses a descrambler resynchronization method comprising a resynchronization signal.

Nakano does not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a descrambler resynchronization method wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

Nakano and IEEE Std 802.3ab-1999 are analogous art because they both teach on the detection of idle codes over a communication link. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 64**, *Nakano* discloses a descrambler resynchronization method wherein a resynchronization signal is forced to a first state when said counter exceeds said predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

Nakano does not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a descrambler resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 65**, *Nakano* does not disclose a descrambler method compliant with IEEE section 802.3ab

The IEEE Std 802.3ab-1999 discloses a descrambler resynchronization method wherein the network device is compliant with IEEE section 802.3ab (pg. 18, Fig. 40-3.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to comply with IEEE section 802.3ab. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

6. **Claims 13-15, 35-37, and 57-59** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Pub. 2001/0044914 A1 to *Nakano et al*. view of US Patent No. 6,538,994 B1 to *Horspool et al*. as applied, and in further IEEE Std 802.3ab-1999.

As to **claim 13**, *Nakano* discloses a false carrier resynchronization device comprising a resynchronization signal.

Nakano and *Horspool* do not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

Nakano, Horspool and IEEE Std 802.3ab-1999 are analogous art because they all teach on the detection of idle codes over a communication link. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 14**, *Nakano* discloses a false carrier resynchronization device wherein a resynchronization signal is forced to a first state when said counter exceeds said predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

Nakano and *Horspool* do not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8,

loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 15**, *Nakano* and *Horspool* do not disclose a network device compliant with IEEE section 802.3ab

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein the network device is compliant with IEEE section 802.3ab (pg. 18, Fig. 40-3.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to comply with IEEE section 802.3ab. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 35**, *Nakano* discloses a false carrier resynchronization device comprising a resynchronization signal.

Nakano and *Horspool* do not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8,

loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

Nakano, Horspool and IEEE Std 802.3ab-1999 are analogous art because they all teach on the detection of idle codes over a communication link. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 36**, *Nakano* discloses a false carrier resynchronization device wherein a resynchronization signal is forced to a first state when said counter exceeds said predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

Nakano and *Horspool* do not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 37**, *Nakano* and *Horspool* do not disclose a network device compliant with IEEE section 802.3ab

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein the network device is compliant with IEEE section 802.3ab (pg. 18, Fig. 40-3.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to comply with IEEE section 802.3ab. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 57**, *Nakano* discloses a false carrier resynchronization method comprising a resynchronization signal.

Nakano and *Horspool* do not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

Nakano, Horspool and IEEE Std 802.3ab-1999 are analogous art because they all teach on the detection of idle codes over a communication link. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have

been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 58**, *Nakano* discloses a false carrier resynchronization method wherein a resynchronization signal is forced to a first state when said counter exceeds said predetermined threshold during said predetermined period (Fig. 8, S917, invalid_count=4.)

Nakano and *Horspool* do not disclose a loc_rcvr_status signal.

The IEEE Std 802.3ab-1999 discloses a resynchronization device wherein said resynchronization signal is a loc_rcvr_status signal (pg. 26, section 40.2.8, loc_rcvr_status can be base on detecting errors during reception of symbol streams that represent the idle mode.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a loc_rcvr_status signal. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

As to **claim 59**, *Nakano* and *Horspool* do not disclose a method compliant with IEEE section 802.3ab

The IEEE Std 802.3ab-1999 discloses a resynchronization method wherein the network device is compliant with IEEE section 802.3ab (pg. 18, Fig. 40-3.)

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to comply with IEEE section 802.3ab. The suggestion/motivation would have been to improve synchronization (IEEE Std 802.3ab-1999, pg, 16, section 40.1.3.)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON LEVELLE whose telephone number is (571)270-5618. The examiner can normally be reached on Monday-Thursday, 8:30-5:00, est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick Ferris can be reached on 571-272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. L./
Examiner, Art Unit 2416

/Derrick W Ferris/
Supervisory Patent Examiner, Art Unit 2416